



10/750, 178

Practitioner's Docket No. 1945/A47

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Grodzins et al.

Application No.: Not Yet Assigned 10/750, 178 Group Art Unit: Not Yet Assigned

Filed: 31 December 2003

Examiner: Not Yet Assigned

For: Detection of Neutrons and Sources of Radioactive Material

**Commissioner for Patents**

**P.O. Box 1450**

**Alexandria, VA 22313-1450**

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT  
WITHIN THREE MONTHS OF FILING OR  
BEFORE MAILING OF FIRST OFFICE ACTION (37 C.F.R. § 1.97(b))**

**NOTE:** "An information disclosure statement shall be considered by the Office *if* filed by the applicant. (1) within three months *of* the filing date *of* a national application; (1) within three months *of* the date *of* entry *of* the national stage as set forth in § 1.491 In an International application; or (3) before the mailing date *of* a first Office action on the merits, whichever event occurs last." 37 C.F.R. § 1.97(b)

**CERTIFICATE of MAILING/TRANSMISSION (37 C.F.R. § 1.8(a))**

I hereby certify that this correspondence is, on the date shown below, being:

**MAILING**

**FACSIMILE**

☒ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

☐ transmitted by facsimile to the Patent and Trademark Office.

Date: February 9, 2004

  
Signature

Charlton Shen

(type or print name of person certifying)

(Transmittal of Information Disclosure Statement Within Three Months of Filing or Before Mailing of First Office)

**NOTE:** The "filing date of a national application" under 37 C.F.R. § 1.97(b) has two possible meanings. Where the filing is a direct one to the United States Patent & Trademark Office, the filing is defined in 37 C.F.R. § 1.53(b) as "the date on which: (1) A specification containing a description pursuant to § 1.71 and at least one claim pursuant to § 1.75; and (2) any drawing required by § 1.81(a), are filed in the Patent and Trademark Office in the name of the actual inventor or inventors as required by § 1.41." 37 C.F.R. § 1.97(b)(1). On the other hand, an international application that enters the national stage occurs when the applicant has filed the documents and fees required by 35 U.S.C. § 371(c) within the periods set forth in § 1.494 or § 1.495. 35 U.S.C. § 371(c) requires the filing of the following: (1) the basic national fee; (2) a copy of the international application, unless already sent by the International Bureau, and optionally an English translation if filed in another language; and, also optionally (3) amendments under PCT Article 19, with a translation into English if made in another language; (4) an oath or declaration; and (5) a translation into English of any annexes to the international preliminary examination report, if such annexes were made in another language. The optional items must be submitted later, with surcharges. 37 C.F.R. § 1.97(b)(2).

### IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING INFORMATION DISCLOSURE STATEMENT

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 C.F.R. § 1.97(b).

**NOTE:** "No certification or fee is due when the filing is made within the above time period. It is advisable to ensure that no Office action has been mailed if the disclosure statement is delayed until after three months from filing."

**NOTE:** "An information disclosure statement will be considered to have been filed on the day it was received in the Office, or on an earlier date of a mailing if accompanied by a properly executed certificate of mailing under 37 C.F.R. 1.8, or Express Mail certificate under 37 C.F.R. 1.10. An Office action is mailed on the date indicated in the Office action." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

**NOTE:** "The term national application' Includes continuing applications (continuations, divisions, continuations-in-part) so three-months will be measured from the actual filing date of an application as opposed [sic] to the effective date of a continuing application." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

**NOTE:** "An action on the merits means an action which treats the patentability of the claims in an application, as opposed to only formal or procedural requirements. An action on the merits would, for example, contain a rejection or indication of allowability of a claim or claims rather than just a restriction requirements (37 C.F.R. 1.142) or just a requirement for additional fees to have a claim considered (37 C.F.R. 1.16(d)). Thus, if an application was filed on Jan. 1 and the first Office action on the merits was not mailed until six months later on July 1, the examiner would be required to consider any proper information disclosures statement filed prior to July 1." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

**WARNING:** "A petition for suspension of action to allow applicant time to submit an information disclosure statement will be denied as failing to present good and sufficient reasons, since 37 C.F.R. § 1.97 provides adequate recourse for the timely submission of prior art for consideration by the examiner." Notice of July 6, 1992 (1141 O.G. 63).

Reg. No.: 54,442

  
Signature of Practitioner

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Bromberg & Sunstein LLP  
125 Summer Street, Boston, MA 02110

(Transmittal of Information Disclosure Statement Within Three Months of Filing or Before Mailing of First Office Action)

**Practitioner's Docket No. 1945/A47****PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Grodzins et al.

Application No.: Not Yet Assigned

Art Unit: Not Yet Assigned

Filed: 31 December 2004

Examiner: Not Yet Assigned

For: Detection of Neutrons and Sources of Radioactive Material

**Commissioner for Patents****P.O. Box 1450****Alexandria, VA 22313-1450****INFORMATION DISCLOSURE STATEMENT****CERTIFICATE UNDER 37 C.F.R. § 1.8(a) and 1.10\****(When using Express Mail, the Express Mail label number is mandatory;  
Express Mail certification is optional.)*

I hereby certify that this correspondence is, on the date shown below, being:

**MAILING**deposited with the United States Postal Service in an envelope addressed to the Commissioner for Patents  
P.O. Box 1450, Alexandria, VA 22313-1450☒ **37 C.F.R. § 1.8(a)****37 C.F.R. § 1.10\***☒ with sufficient postage as first class mail.☐ as "Express Mail Post Office to Addressee"Mailing Label No. \_\_\_\_\_ **(mandatory)****TRANSMISSION**☐ transmitted by facsimile to the Patent and Trademark Office.Date: February 9, 2004\_\_\_\_\_  
SignatureCharlton Shen

(type or print name of person certifying)

**NOTE:** "An information disclosure statement shall be considered by the Office if filed by the applicant within any one of the following time periods:

- (1) Within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d);
- (2) Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application;
- (3) Before the mailing date of a first Office action on the merits; or
- (4) Before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114."

37 C.F.R. § 1.97(b).

**NOTE:** "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." 37 C.F.R. § 1.56(a).

"Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) each inventor named in the application;
- (2) each attorney or agent who prepares or prosecutes the application; and
- (3) every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application." 37 C.F.R. § 1.56(c).

**NOTE:** The "duty as described in § 1.56 will be met so long as the information in question was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98 before issuance of the patent." Notice of January 9, 1992, 1135 O. G. 13 -25 at 17.

**WARNING:** "No information disclosure statement maybe filed in a provisional application." 37 C.F.R. § 1.51(d).

### **List of Sections Forming Part of This Information Disclosure Statement**

The following sections are being submitted for this Information Disclosure Statement:

(check sections forming a part of this statement: discard *unused* sections and number pages consecutively)

1. ☒ Preliminary Statements
2. ☒ FORMS PTO/SB/08A and 08B (formerly FORM PTO-1449)
3. ☐ Statement as to Information Not Found in Patents or Publications
4. ☒ Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted
5. ☐ Cumulative Patents or Publications
6. ☒ Copies of Listed Information Items Accompanying This Statement
7. ☐ Concise Explanation of Non-English Language Listed Information Items
  - 7A. ☐ EPO Search Report
  - 7B. ☐ English Language Version of EPO Search Report
8. ☐ Translation(s) of Non-English Language Documents
9. ☐ Concise Explanation of English Language Listed Information Items (Optional)
10. ☒ Identification of Person(s) Making This Information Disclosure Statement

**NOTE:** "Once the minimum requirements are met the examiner has an obligation to consider the information." Notice of April 20, 1992 (1138 O.G. 37-41, 37).

**Section 1. Preliminary Statements**

Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. § 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

(Information Disclosure Statement—Section 1. Preliminary Statements [6-1]--)

**SECTION 2. FORMS PTO/SB/08A and 08B (formerly Form PTO-1449)****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Grodzins et al. Attorney Docket: 1945/A47  
Serial No: Not Yet Assigned Art Group Unit: Not Yet Assigned  
Date Filed: 31 December 2003 Examiner Name: Not Yet Assigned  
Invention: Detection of Neutrons and Sources of Radioactive Material

**LIST OF PATENTS AND PUBLICATIONS FOR APPLICANTS'  
INFORMATION DISCLOSURE STATEMENT****United States Patents Documents**

Examiner Initials	Reference Number	Patent or Publication Number	Issue Date / Publication Date	Inventor
	AA	4,180,737	Dec. 25, 1979	Kingsley
	AB	4,511,799	Apr. 16, 1985	Bjorkholm
	AC	4,620,099	Oct. 28, 1986	Schoenig, Jr. et al.
	AD	5,376,795	Dec. 27, 1994	Hasegawa et al.
	AE	5,764,683	Jun. 9, 1998	Swift et al.
	AF	5,838,759	Nov. 17, 1998	Armistead
	AG	6,151,381	Nov. 21, 2000	Grodzins et al.
	AH	6,292,528	Sept. 18, 2001	Wieczorek et al.
	AI	5,600,700	Feb. 4, 1997	Krug et al.
	AJ	5,734,166	Mar. 31, 1998	Czirr
	AK	5,391,879	Feb. 21, 1995	Tran et al.
	AL	5,978,438	Nov. 2, 1999	Resnik et al.
	AM	2002/0067789 A1	Jun. 6, 2002	Wallace et al.
	AN	5,973,328	Oct. 26, 1999	Hiller et al.
	AO	2002/141529 A1	Oct. 3, 2002	Olsher et al.
	AP	5,334,840	Aug. 2, 1994	Newacheck et al.
	AQ	4,795,910	Jan. 3, 1989	Henderson et al.
	AR	4,667,107	May 19, 1987	Wang
	AS	5,753,921	May 19, 1998	Trauernicht et al.
	AT	5,420,452	May 30, 1995	Tran et al.
	AU	5,572,034	Nov. 5, 1996	Karellas
	AV	5,650,626	Jul. 22, 1997	Trauernicht et al.
	AW	6,262,421	Jul. 17, 2001	Tran

### Foreign Patent Documents

Examiner Initials	Reference Number	Country	Document Number	Publication Date	Patentee or Applicant
	AX	Germany	DE 40 17 100 A	Dec. 6, 1990	Siemens AG
	AY	Europe	EP 0 971 215 A	Jan. 12, 2000	Impact Systems Inc.
	AZ	France	FR 2,492,159	Apr. 16, 1982	Thomson-CSF

### Other Documents

Examiner Initials	Reference Number	Author	Title of Article, Title of Journal, Volume Number, Page Numbers, Date
	BA	Nittoh, K. et al	"Discriminated neutron and x-ray radiography using multi-color scintillation detector," <i>Nuclear Instruments &amp; Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , Vol. 428, no. 2-3, pp. 583-588, 4 June 1999.
	BB	Novikov, V.M.	"A method for monitoring of Gd concentration in Gd-loaded scintillators," <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , Vol. 366, no. 2-3, , pp. 413-414, 1 December 1995.
	BC		MCP Imaging Detectors for X, EUV, VUV, UV, neutron, ion and electron fields imaging. Copyright 1999, 2000, 2001.
	BD		Position-sensitive two dimensional neutron detector and imaging system. Copyright 1999, 2000.
	BE	Bliss et al.	"Real-Time Dosimetry for Boron Neutron-Capture Therapy," <i>IEEE Trans. on Nucl. Sci.</i> , Vol. 42, no. 4, pp. 639-643, August 1995.

Examiner Signature: \_\_\_\_\_

Date Considered: \_\_\_\_\_

NOTE FOR EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance AND not considered. Include copy of this form with next communication to applicant.

#### **Section 4. Identification of Prior Application in Which Listed Information Was Already Cited**

**NOTE:** "A copy of any patent, publication or other information listed in an information disclosure statement is not required to be provided if it was previously cited by or submitted to the Office in a prior application, provided that the prior application is properly identified in the statement and relied upon for an earlier filing date under 35 U.S.C. 120." 37 C.F.R. § 1.98(d).

**WARNING:** "This exception to the requirement for copies of information does not apply to information which was cited in an international application under the Patent Cooperation Treaty." Notice of April 20, 1992 (1138 O.G. 37-41, 38)

**WARNING:** "Information which is cited or submitted to the Office in the parent application of a file wrapper continuing application under 37 C.F.R. 1.62 will be part of the file before the examiner and need not be resubmitted in the continuing application. Likewise, the examiner will consider information cited or submitted to the Office in a parent application when examining a continuing application and thus this information need not be resubmitted unless applicant desires the information to be printed on the patent." Notice of April 20, 1992 (1138 O.G. 37-41, 37)

**WARNING:** While a copy of a non-English language item of information need not be submitted, if it was previously submitted to, or cited by, the Office in a prior application, provided it is properly identified in this statement and this application relies on that earlier filing date under 35 U.S.C. 120, nevertheless, the requirement in § 1.98(a)(3) for a concise explanation of non-English language information would not be satisfied by a statement that a reference was cited in the prosecution of a parent application. The concise explanation must explain the relevance, as presently understood by the person designated in § 1.56(c) most knowledgeable about the content of the information. Notice of January 9, 1992, 1135 O.G. 13-25, at 20.

This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application SN: 09/818,987, filed on March 27, 2001, which claims priority from a U.S. Provisional Application with Serial No. 60/192,425, filed March 28, 2000.

*(complete the following, if applicable)*

- This application also relies, under 35 U.S.C. 120, on the earlier filing date of prior application SN: 10/156,989, filed on May 29, 2002, which claims priority from a U.S. Provisional Application with Serial No. 60/360,854, filed March 1, 2002.

The following references were submitted to, and /or cited by, the Office in the prior application(s) and, therefore, are not required to be provided in this application:

References AA – BE in Section 2 of this IDS.



## Section 6. Copies of Listed Information Items Accompanying This Statement

NOTE: 37 C.F.R. § 198(a)(2) requires that any information disclosure statement filed under § 1.97 shall include:

"A legible copy of.:

- (i) Each U.S. patent application publication and U.S. and foreign patent;
- (ii) Each publication or that portion which caused it to be listed,
- (iii) For each cited pending U.S. application, the application specification including the claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion. . .

Legible copies of all items listed in Forms PTO/SB/08A and 08B (formerly Form PTO-1449) accompany this information statement.

(complete the following, if applicable)

Exception(s) to above:

US patent application publications and U.S. patents.

Note: the Patent and Trademark Office has waived the requirement under 37 CFR 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003

- ☒ Items in prior application, from which an earlier filing date is claimed for this application, as identified in Section 4.
- ☐ Cumulative patents or publications identified in Section 5.

**Section 10. Identification of Person(s) Making This Information Disclosure Statement**

The person making this statement is

*(check each applicable item)*

- (a) ☐ the inventor(s) who signs below

\_\_\_\_\_  
SIGNATURE OF INVENTOR

\_\_\_\_\_  
(type or print name of inventor who is signing)

- (b) ☐ an individual associated with the filing and prosecution of this application (37 C.F.R. § 1.56(c))

\_\_\_\_\_  
SIGNATURE OF INVENTOR

\_\_\_\_\_  
(type or print name of inventor who is signing)

- (c) ☒ the practitioner who signs below on the basis of the information:

*(check each applicable item)*

- ☐ supplied by the inventor(s).
- ☐ supplied by an individual associated with the filing and prosecution of this application. (37 C.F.R. § 1.56(c))
- ☒ in the practitioner's file.

Reg. No.: 54,442

Tel. No.: 617/443-9292

Customer No.: 002101

  
\_\_\_\_\_  
SIGNATURE OF PRACTITIONER

Charlton Shen

\_\_\_\_\_  
(type or print name of person certifying)

Bromberg & Sunstein LLP

125 Summer Street

Boston, MA 02110-1618

(Information Disclosure Statement-Section 10. Identification of Person(s) Making This Information Disclosure Statement [6-1]-

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